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| APPLICATION NO.                | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/806,733                     | 03/23/2004  | Michael W. Hawman    | EH-10536 B          | 2544             |
| 52237                          | 7590        | 07/11/2006           | EXAMINER            |                  |
| BACHMAN & LAPOINTE, P.C. (P&W) |             |                      | JARRETT, RYAN A     |                  |
| 900 CHAPEL STREET              |             |                      | ART UNIT            |                  |
| SUITE 1201                     |             |                      | PAPER NUMBER        |                  |
| NEW HAVEN, CT 06510-2802       |             |                      | 2125                |                  |

DATE MAILED: 07/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/806,733

Applicant(s)

HAWMAN ET AL.

Examiner

Ryan A. Jarrett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 05 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 15-21 is/are pending in the application.
- 4a) Of the above claim(s) 17-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15 and 16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/24/04, 6/04/04</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION*****Election/Restrictions***

1. Applicant's election with traverse of Invention I (claims 15 and 16) in the reply filed on 06/05/2006 is acknowledged. The traversal is on the ground(s) that examination of all the claims would not present an undue burden.

Applicant argues, "Although separately classified, the search classes of the two groups are expected to largely, if not completely overlap." This is not found persuasive because, for one, it is impossible for the text search class of Group I to "completely" overlap with the text search class of Group II since the subject matter of Group I does not itself "completely" overlap with the subject matter of Group II.

Secondly, the text search classes cannot be considered to "largely" overlap either. For example, the text search of Group I may include terms such as "gas turbine engine", "tag", "paperwork", "ship", and "maintenance", for example. On the other hand, the text search string of the evidence claims of Group II (claims 17 and 21) would *at most* include only the common term "maintenance", in addition to terms such as "database" and "identifier" which are not required at all in the invention of Group I. Evidences claims 17 and 21 do not even require the product to be a gas turbine engine. Therefore, the only true overlap between Invention I and evidence claims 17 and 21 of Invention II is that both pertain to "maintenance" operations. This is neither a "complete" overlap, nor even a "large" overlap of search strings, considering all the possible applications of "maintenance" operations that exist in the prior art databases.

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The requirement is still deemed proper and is therefore made FINAL.

Claims 17-21 withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 06/05/2006.

***Priority***

2. Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged. Applicant has complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 119(e) and 120.

This application is a "divisional" of 10/064,105 filed on 06/11/2002, which claims priority to United States Provisional Patent Application number 60/297,653 filed on 06/12/2001.

It is noted however that this application is a voluntary divisional application, since parent patent application No. 10/064,105 was never restricted. Thus, the provisions of 35 U.S.C. 121 do not apply in this case.

***Information Disclosure Statement***

3. The information disclosure statements (IDS) submitted on 03/23/2004 and 06/04/2004 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements are being considered by the examiner.

***Claim Objections***

4. Claims 1 is objected to because of the following informalities:

Claim 1 recites the limitation "other paperwork" in line 2. There is insufficient antecedent basis for this limitation in the claim, since there is no prior mention of any "paperwork" in the claim. The limitation "tag" in line 1 is broadly construed to include tags such as metal tags, markings, RFID tags, and inscriptions, in addition to paper tags.

Appropriate correction is required.

***Claim Interpretations***

5. The claimed limitation "tag" is broadly interpreted to encompass several types of tags, e.g., a paper tag, a metal tag, a marking, an RFID tag, an inscription, etc. In the event that the claimed "tag" is interpreted to mean a paper tag, then the limitation "no other paperwork" is interpreted to mean "no other paperwork". However, in the event the claimed "tag" is interpreted to mean anything other than a paper tag, then the limitation "no other paperwork" is interpreted to mean "no paperwork" since there is no antecedent basis for any "other" paperwork under this interpretation since the tag is not a paper tag.



***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. If the claimed limitation “tag” is interpreted to be anything other than a paper tag, then claims 15 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Martin US 4,280,185. Martin discloses:

**15. In a maintenance operation on a part of a gas turbine engine having a tag thereon** (EN: *It is noted that this Jepson format is taken as an implied admission that the subject matter of the preamble is the work of another. Martin nevertheless discloses the features of this preamble.*

e.g., col. 1 lines 18-20: “Each module is identified at manufacture with a data plate, mounted at a convenient location on the module body.”, EN: *The “data plate” corresponds to the prior art “tag”.*

col. 1 lines 32-35: “These present tracking schemes rely heavily on the reliability of manual logging on paper forms by maintenance personnel and the manual transcribing via keypunch into an information system.”, EN: *In the prior art tracking schemes, paperwork is*

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*shipped with the engine parts. The invention of Martin does not ship paperwork with the engine parts.), wherein the improvement comprises no other paperwork being shipped with said part*

(col. 1 lines 7-10: "This invention relates to information recording systems, and, more particularly to a fully automated tracking system for recording the service life history and configuration of gas turbine engines.",

col. 1 lines 56-65: "According to one aspect of the present invention an LTS includes a non-volatile memory, a life tracking unit (LTU), and a plurality of module identifier units mounted on associated engine modules which provide the module identification signal information to the LTU, the LTU including an electronic signal processor which periodically interrogates each of the module identifier units and stores the identification signal information received in response at permanent address locations in the non-volatile memory.",

EN: *The "module identifier units" of Martin correspond to the claimed "tag" in the improvement embodiment. The "tracking" of Martin corresponds to the claimed "shipped". The definition of "tracking" is "to observe or monitor the course of". Therefore, since the gas turbine engine parts of Martin are "tracked", they are inherently moved over some positional course, or "shipped". If the gas turbine engine parts were not "shipped" anywhere, then there would be no need to "track" them. Furthermore, Martin also discloses replacing the engine modules at periodic service intervals, which clearly requires the modules to be "shipped", or moved).*

**16. The maintenance operation of claim 15, wherein said maintenance operation is a maintenance, repair or overhaul of said part (e.g., col. 1 lines 11-17: "Modern jet engines,**

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such as the F-100 gas turbine engine, are constructed on a modular basis. In the F-100 engine there are as many as six separate engine modules which in combination make up the entire engine assembly. This allows individual modules to be replaced at periodic service intervals, when their individual service life is used up, or when unanticipated failure occurs.”,

col. 1 lines 32-35: “These present tracking schemes rely heavily on the reliability of manual logging on paper forms by maintenance personnel and the manual transcribing via keypunch into an information system.”, EN: *Replacing a module at “periodic service intervals” corresponds at least to the claimed “maintenance” operation.*).

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8. If the claimed limitation “tag” is interpreted to be anything other than a paper tag, then claims 15 and 16 are additionally rejected under 35 U.S.C. 102(e) as being anticipated by Marshall et al. US 6,728,610. Marshall et al. discloses:

15. **In a maintenance operation on a part of a gas turbine engine** (e.g., col. 1 lines 9-11: “This invention relates generally to aircraft engines and, more particularly, to systems and methods for performing maintenance services on aircraft gas turbine engines.”) **having a tag thereon** (e.g., col. 1 lines 52-65: “bar code associated with one or more engine components”, “microchip associated with one or more engine components”), **wherein the improvement comprises no other paperwork being shipped with said part** (e.g., col. 1 lines 16-22: “After an aircraft engine is put in service, other engine configuration changes may occur. Aircraft engines typically include a plurality of components that are serviced at regular scheduled intervals. To perform servicing during such regular scheduled intervals, often the aircraft engine is disassembled to permit access to the components to be serviced.”,

col. 1 lines 52-54: “The ‘desired’ and ‘as flying’ configurations can be stored in one or more databases. The ‘as flying’ configuration can be updated as maintenance is performed on the engine”, EN: *The act of performing a maintenance on the disassembled engine of Marshall et al. correlates to the claimed part “being shipped”, or moved.*

col. 1 lines 60-65: “In one embodiment, the ‘as flying’ configuration can be determined, at least in part, by querying bar codes associated with one or more engine components. Alternatively, or in combination with the use of such bar codes, the ‘as flying’ configuration can be determined by querying microchips associated with one or more engine components”, EN: *Marshall et al. does not disclose shipping paperwork with the engine parts, so this is considered*

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*a teaching for "no other paperwork being shipped with said part". The tracking method of Marshall et al. is implemented using only computers, scanners/readers, and identification tags such as barcodes or microchips. There is no "other paperwork" involved.).*

**16. The maintenance operation of claim 15, wherein said maintenance operation is a maintenance, repair or overhaul of said part (e.g., col. 5 lines 32-42: "The maintenance system can utilize the identified configuration change actions, the scheduled maintenance actions, and the nonscheduled maintenance actions to determine at 600 a maintenance plan of action. The maintenance plan of action can include triggering supply chain actions, such as part orders, for obtaining needed spare parts, and scheduling groups of related maintenance actions together at cost effective intervals while meeting aircraft engine safety regulations. As the maintenance plan of action is executed, the appropriate databases can be updated").**

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. If the claimed limitation "tag" is interpreted to be a paper tag, then claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin US 4,280,185 in view of Peltier US 6,671,611.

Martin discloses that the "tag" is either a data plate or a module identification unit providing an identification code.

Martin does not explicitly disclose that the "tag" is a paper tag.

Peltier discloses a method and apparatus for identifying parameters of engine components during assembly and servicing operations, comprising affixing a paper tag or label (bar code label) to the engine components (e.g., Fig. 12, col. 14 line 54 – col. 15 line 10: "the label 626 may be a printed label adhesively attached to the component", col. 16 line 61 – col. 17 line 4: "The present technique may also be used at a service facility, where the combustion engine is returned for repair or other servicing").

Martin and Peltier are analogous art since both pertain to affixing tags to engine parts in order to track the parts during maintenance and/or assembly operations.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the "tag" of Martin to be a paper tag since Peltier teaches that a paper tag (bar code label) attached to an engine component advantageously

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allows a user to easily scan the bar code to determine component information during installation or repair operations (e.g., col. 22 line 62 – col. 23 line 12: “The bar code is advantageously configured such that a buyer/user can easily scan the bar code to access the coefficients during installation of the fuel injector”). Additionally, a paper bar code tag is removable, whereas a bar code physically imprinted onto a product is not easily removable. Therefore, a paper bar code tag provides a user the ability to easily change the bar code associated with a particular product, if necessary.

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11. If the claimed limitation "tag" is interpreted to be a paper tag, then claims 15 and 16 are additionally rejected under 35 U.S.C. 103(a) as being unpatentable over Marshall et al. US 6,728,610 in view of Peltier US 6,671,611.

Marshall et al. discloses that the "tag" is either a bar code or a microchip.

Marshall et al. does not explicitly disclose that the bar code is on a paper tag or label.

Peltier discloses a method and apparatus for identifying parameters of engine components during assembly and servicing operations, comprising affixing a paper tag or label (bar code label) to the engine components (e.g., Fig. 12, col. 14 line 54 – col. 15 line 10: "the label 626 may be a printed label adhesively attached to the component", col. 16 line 61 – col. 17 line 4: "The present technique may also be used at a service facility, where the combustion engine is returned for repair or other servicing").

Marshall et al. and Peltier are analogous art since both pertain to affixing tags to engine parts in order to track the parts during maintenance and/or assembly operations.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the bar code "tag" of Marshall to be a paper bar code tag since Peltier teaches that a paper tag (bar code label) attached to an engine component advantageously allows a user to easily scan the bar code to determine component information during installation or repair operations (e.g., col. 22 line 62 – col. 23 line 12: "The bar code is advantageously configured such that a buyer/user can easily scan the bar code to access the coefficients during installation of the fuel injector"). Additionally, a paper bar code tag is removable, whereas a bar code physically imprinted onto a



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product is not easily removable. Therefore, a paper bar code tag provides a user the ability to easily change the bar code associated with a particular product, if necessary.

***Double Patenting***

12. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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13. Claims 15 and 16 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 15 of copending Application No. 10/064,105 in view of Marshall et al. US 6,728,610.

It is noted that the instant application is a voluntary divisional application, since parent patent application No. 10/064,105 was never restricted. Thus, the provisions of 35 U.S.C. 121 do not apply in this case.

Claims 1 and 15 of Application No. 10/064,105 disclose a method of routing or shipping a gas turbine engine part having a tag thereon. Additionally, since claims 1 and 15 do not recite that any "other paperwork" is shipped with the part, this is considered a teaching of "no other paperwork being shipped" with the part.

Claims 1 and 15 of Application No. 10/064,105 do not explicitly disclose that the method of routing the gas turbine engine part is related to a "maintenance" operation.

Marshall et al. discloses a method of routing a gas turbine engine part in a maintenance/repair operation. The part is tracked with a tag, such as a bar code tag or a microchip tag

(e.g., col. 1 lines 16-22: "After an aircraft engine is put in service, other engine configuration changes may occur. Aircraft engines typically include a plurality of components that are serviced at regular scheduled intervals. To perform servicing during such regular scheduled intervals, often the aircraft engine is disassembled to permit access to the components to be serviced.",

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col. 1 lines 52-54: "The 'desired' and 'as flying' configurations can be stored in one or more databases. The 'as flying' configuration can be updated as maintenance is performed on the engine",

col. 1 lines 60-65: "In one embodiment, the 'as flying' configuration can be determined, at least in part, by querying bar codes associated with one or more engine components. Alternatively, or in combination with the use of such bar codes, the 'as flying' configuration can be determined by querying microchips associated with one or more engine components.").

It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the method of claims 1 and 15 of US 10/064,105 in a "maintenance" operation since Marshall et al. teaches that using tags to track and route gas turbine engine parts (as also recited in US 10/064,105) in a maintenance operation can minimize service part inventories at servicing locations and reduce turn-around-time for aircraft engines receiving maintenance (e.g., col. 4 lines 43-55).

This is a provisional obviousness-type double patenting rejection.

***Conclusion***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Pappas US 6,338,045 discloses an apparatus for and method of managing and tracking activities and parts.

Aoki US 2001/0056310 discloses a task instructing method and apparatus.

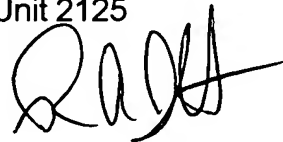
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15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan A. Jarrett whose telephone number is (571) 272-3742. The examiner can normally be reached on 10:00-6:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on (571) 272-3749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ryan A. Jarrett  
Examiner  
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6/23/06